BM6 mkIII – Owner's manual

DYNAUDIO
Professional

Introduction

Important safety instructions



The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with dry cloth.
7. Install in accordance with the manufacturer’s instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer, or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over.

13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

Warning!

– To reduce the risk of fire or electrical shock, do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.
– This apparatus must be earthed.
– Use a three wire grounding type line cord like the one supplied with the product.

- Be advised that different operating voltages require the use of different types of line cord and attachment plugs.
- Always observe the local safety regulations. Ensure that the factory-set power requirements for the device (refer to the label on the back of the monitor) corresponds to the mains supply in your region.
- This equipment should be installed near the socket outlet and disconnection of the device should be easily accessible.
- To completely disconnect from AC mains, disconnect the power supply cord from the AC receptacle.
- The mains plug of the power supply shall remain readily operable.
- Do not install in a confined space.
- Do not open the unit – risk of electric shock inside.

Caution:

You are cautioned that any change or modifications not expressly approved in this manual could void your authority to operate this equipment.

Service

- There are no user-serviceable parts inside.
- All service must be performed by qualified personnel.

EMC/EMI

This equipment has been tested and found to comply with the limits for a Class B Digital device, pursuant to part 15 of the FCC rules.

These limits are designed to provide reasonable protection against harmful interference in residential installations. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If the equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off an on, the user is encouraged to try to correct the interference by one or more of the following measures.

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For customers in Canada:

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.



等边三角形内带有箭头的闪电状符号意在提醒用户在产品的外壳内存在未绝缘的“危险电压”，电压可能很高，足以构成触电危险。



等边三角形内的感叹号符号意在提醒用户随产品一起的文字资料里有重要的操作和维护（维修）说明。

阅读这些说明。

保留这些说明。

注意所有的警告。

遵照所有的说明。

不要在靠近水的地方使用本设备。

只能用干布清洁设备。

按照制造商的说明进行安装。

不要在散热器、热风器、火炉或其他产生热量的设备（包括放大器）等热源附近安装使用本设备。

请勿破坏极性插头或接地型插头的安全保护性目的。极性插头有两个插片，其中一个比另一个宽。接地型插头有两个插片，另外还有一个接地插脚。极性插头的宽插片和接地型插头的接地插脚为您提供安全保障。如果提供的插头无法插入您使用的插座，请咨询电工，更换过时的插座。

防止电源线被踩踏或挤压，特别是插拔插头和插座时注意不要损坏与插头和插座连接处的电源线。

仅使用制造商指定的附件/配件。



仅使用制造商指定的或与设备一同出售的推车、支架、三脚架或桌子。当使用推车时，要小心移动与设备连在一起的推车，以免推车翻倒损坏设备。

遇雷雨天气或长时间不使用设备时，请拔下设备的插头。

请将所有维修事项交由有资质的售后服务人员完成。设备发生损坏时需进行维修，例如电源线或插头损坏，液体溅入设备或物体坠落到设备上，设备遭受雨淋或受潮，设备不能正常工作或被摔坏。

警告！

为了减少火灾或触电的危险，请不要让本设备遭受雨淋或液体溅洒，并确保设备上不放置任何盛有液体的物体，如花瓶。

请注意不同的工作电压需要使用不同类型的电源线和连接插头。

一定要遵守当地的安全规定。确保设备出厂设置功率要求（请参阅监听音箱背面的标签）与您所处地的市电电源相对应。

本设备应安装在靠近插座的地方，并确保能方便切断电源。

从交流电源插座拔下电源插头，以完全断开交流电源。

电源插座应保持随时可用状态。

不要将设备安装在密闭空间。

不要拆开设备，内有触电危险。

维修：

设备内没有用户可自行维修的部件。

所有维修必须由有资质的人员进行。

注意：

您必须注意未在手册中明确许可的任何变动或修改均可能导致您操作该设备无效。

此产品只适用于海拔2000m以下和非热带地区使用。





Introduction

Congratulations on your purchase of the Dynaudio Professional BM6 mkIII active monitor system. With the right care and attention it will provide many years of excellent and trouble-free audio reproduction. It is most important, however, that you take a few minutes at this early stage of your monitor's life to read this manual. It contains essential information to help you get the best from your new monitors.

The latest revision of this manual is always available on our website:
dynaudioprofessional.com

For support, please refer to:
dynaudioprofessional.com/support/

Please enjoy!

Break-in time

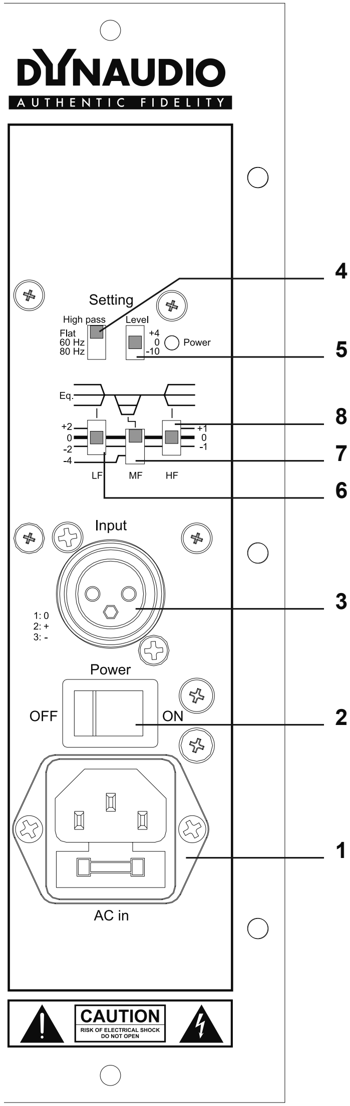
The transducers of your Dynaudio Professional BM6 mkIII will achieve better sound quality after breaking in, especially after the first hours of use you may notice a significant advance in sound quality, and further subtle improvements in subsequent hours of use.

Operation

Overview – rear panel

Correct setup and connections is essential to achieve optimal performance from your monitors. Please follow the instructions on the following pages.

1. AC power Input and fuse
2. Power On/Off switch
3. Balanced analog input (XLR)
4. High Pass filter switch
5. Level trim
6. LF – Low filter setting
7. MF – Mid filter setting
8. HF – Hi filter setting



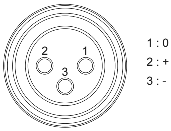
Setting up

1/2. Power on/off switch / AC power in

Before switching on, make sure Mains Voltage matches your areas Mains Voltage specification. Replace fuse only with the fuse-type marked on the rear-panel label.

3. Balanced analog input

Audio Input is via a female XLR connector. The Input is electronically balanced with following connections. The connections are printed on the rear for easy reference.



If your signal source is unbalanced, usually the unused pin is connected to ground. This is normally done inside the connecting cable. Special adapters (not supplied) can be bought that converts XLR input to single ended RCA type input. For best result use only good quality screened cables and connectors.

Switches

On the rear of the monitor you will find five switches for setting up the monitor for optimum performance in different acoustic environments. Each switch is explained in the following.

4. High pass filter switch

This switch sets the lower cut-off frequency of the monitor. It is used to match the monitor to a subwoofer. You can select between 60 Hz or 80 Hz X-over. Flat is used in case you do not use a subwoofer to assist your monitors. When used with a subwoofer it is recommended to use either 60 Hz or 80 Hz filter, thus allowing a higher undistorted sound pressure level.

5. Level trim

Use this switch to match the sensitivity of the BM 6A mkII monitor to your source.

High-output Source: If your source has a high output, set switch to the -10 position to reduce sensitivity by 10 dB.

Low-output source: If your source has a low output, set switch to the +4 position to gain 4 dB more sensitivity.

6. LF

This switch controls the bass gain level using shelf-type EQ. The level can be set to +2 dB, 0 dB or -2 dB. This filter is used to adjust for the proximity of boundaries, so if positioned close to wall or corner, use the -2 dB setting. If positioned far from walls use the +2 dB or 0 position, depending on other equipment, and personal taste.

7. MF

This switch sets a notch filter, used to compensate for the acoustic effect of a console. Such placement usually results in a response peak in lower midrange. The MF switch activates a bell shaped notch filter, which can compensate. Use either the -2 or the -4 dB setting. Use the setting that provides the flattest response.

8. HF

This switch controls the Treble level and it is used to match the high end of the monitor to your other electronic equipment, and your acoustical environment. Use the setting providing the preferred timbre. If the

sound is too bright, try to set to -1 dB to reduce treble by 1 dB. If the sound is too dull, use +1 dB setting to raise the treble by 1 dB.

Indicators

On the front you will find two diodes. These are positioned just above the Dynaudio Logo.

1. The green power diode indicates speaker on/off status. Green indicates "power on".
2. The second diode has two functions. When the output stage is close to clipping the LED will light up orange. And it will light up red when the amplifier gets too hot. At the same time the monitor will be muted, in order to reduce the temperature.

Protection

The BM6 mkIII monitor has several built in protection systems to reduce the risk of hazard or damage due to overloading.

Both power amplifiers have thermal protection. This activates if a problem should occur, and helps protect both the electronics and the loudspeaker drivers.

There is also a thermal sensor measuring the temperature on the heat sink. An electronic circuit will mute the signal when too high temperature is reached. The protection diode on the front will light up when this happens.

On the tweeter output there is an overload protection to prevent burning the tweeter driver in case of overloading. This circuit will mute the tweeter signal if too much current is fed to the tweeter.

Positioning

The BM6 mkIII is designed as a near to midfield monitor and can be equally well used in both stereo and surround setups. Optimal performance is achieved when positioned 1 to 3 meters from the listener.

It can be placed on stands or on the meter bridge of a console provided that the meter bridge is sufficiently sturdy. For best results, the speakers should be aimed towards the listener in both vertical and horizontal planes.

Note:

Be aware that proper air circulation around the monitor for sufficient cooling is necessary. Also notice that the heat sink is designed to provide maximum cooling when the monitor is positioned vertically.

Miscellaneous

Troubleshooting

– If the Power LED lights green and there is no sound, check your input signal, e.g. by switching speakers.
– If the Power LED does not light at all and there is no sound, check the fuse. If you have replaced the fuse and there still is no sound, contact your Dynaudio Professional Dealer.
– If the protection LED lights red, check the temperature of the heat sink. If it feels hot, turn off the speaker and wait for about ten minutes to allow the amplifier to cool off. Turn it on again. If it works now, it is OK – but you may need more air circulation around your speaker to avoid overheating to occur again.

Care

Components of the highest quality are used in your BM6 mkIII. This assures years of trouble-free operation. Following precautions should still be made though. Avoid running the system into severe clipping. Although there is an advanced protection system, you may be able to destroy your speakers by severe overpowering. When a noticeable distortion occurs, please turn down the level to your speakers.
Avoid hot-plugging the equipment connected to the monitors. Always turn off the speaker and other equipment when plugging or unplugging signals, or switching equipment on or off. Do not touch the drive units by hand. The tweeter especially uses a very fine fabric dome with an ultra-thin coating.

Options

Companion subwoofers for the Dynaudio BM series are the BM9 S II and BM14 S II Precision Subwoofers. Learn more about these subwoofers at:
www.dynaudioprofessional.com

Service

There are no user serviceable parts inside the monitor. If service is required please contact service via:
www.tcsupport.tc

or

TC Electronic
Sindalsvej 34
DK-8240 Risskov
Denmark
Tel: +45 87 42 70 00

Technical specifications

System	Two-way Active Near-field Monitor
Frequency Response (+/- 3 dB)	40 Hz to 21 kHz
Input level for 85 dB SPL @ 1 m	-14 dBu RMS @ 0 dB setting
Input Impedance	65 kOhm each branch
Power consumption	Idle: 15 W / Max: 130 W
Amplifier power	Tweeter: 50 W / Woofer: 100 W
Max SPL 1m, pair	119 dB peak
Max SPL 2m, 5.1	120 dB peak
Bass Principle	Bass reflex
Vent tuning frequency	37 Hz
Internal Cabinet Volume	11.7 liters
Crossover Frequency	1500 Hz
Crossover Slope	6 dB/oct
Tweeter	Esotec 28 mm / 1.1“ soft dome, rear chamber, magnetic fluid, 4 mm alu front, pure alu wire voice coil
Woofer	170 mm/6.5“, one-piece thermo formed polyprop cone, 75 mm / 3“ pure alu voice coil
Weight	11.05 kg
Dimensions (Depth x Width x Height)	328 x 202 x 334 mm

Due to continuous development, these specifications are subject to change without notice.

Notes

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www.dynaudioprofessional.com